

RECEIVED
CENTRAL FAX CENTER

NOV 22 2006

PATENT
Application No. 10/812,837
Attorney Docket No.: 92030/03-701
Amendment*Amendments to the Claims*

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-13 (Canceled)

14. (Previously Presented) A method of implanting a bone implantable device comprising the steps of:

installing a carrier into a carrier receiving area of a bone implantable device;
implanting the bone implantable device adjacent a target bone structure;
applying biologically active substance onto said carrier after said step of
implanting for subsequent delivery to said target bone structure.

15. (Original) The method according to claim 14 further comprising the steps of:

applying said carrier into said carrier receiving area prior to said step of
implanting.

16. (Original) The method according to claim 14 further comprising the steps of:

injecting said biologically active substance through an injection port into
said carrier receiving area.

PATENT
Application No. 10/812,837
Attorney Docket No.: 92030/03-701
Amendment

17. (Canceled)

18. (Currently Amended) An interbody spine fusion cage for fusing adjacent vertebrae, said spinal fusion cage comprising:

a cage body defining an outside surface;

a carrier receiving area defined by said cage body;

an un-doped carrier material loaded in said carrier receiving area;

a port that communicates said outside surface with said carrier receiving area for facilitating delivery of a biologically active substance onto said un-doped carrier material to bind said biologically active substance with said carrier material;

a pathway that communicates with said carrier receiving area for delivering said biologically active substance from said carrier receiving area to a target bone structure;

an end cap on an end of said cage body for enclosing said carrier receiving area; and

wherein said port is defined by said end cap.

19. (Canceled)

20. (Canceled)

PATENT
Application No. 10/812,837
Attorney Docket No.: 92030/03-701
Amendment

21. (Previously Presented) An interbody spine fusion cage for fusing adjacent vertebrae, said spinal fusion cage comprising:

a cage body defining an outside surface;

a carrier receiving area defined by said cage body;

an un-doped carrier material loaded in said carrier receiving area;

a port that communicates said outside surface with said carrier receiving area for facilitating delivery of a biologically active substance onto said un-doped carrier material;

a pathway that communicates with said carrier receiving area for delivering said biologically active substance from said carrier receiving area to a target bone structure;

an end cap on an end of said cage body for enclosing said carrier receiving area;

wherein said port is defined by said end cap; and further comprising:

a plug in said port adapted to be penetrated by a delivery device.

Claims 22-52 (Canceled)

PATENT
Application No. 10/812,837
Attorney Docket No.: 92030/03-701
Amendment

53. (Previously Presented) A method of implanting a bone implantable device comprising the steps of:

pre-loading a carrier doped with a fluidal biologically active substance into a carrier receiving area of a bone implantable device;

implanting the bone implantable device adjacent a target bone structure for facilitating a migration of said biologically active substance into contact with said target bone structure but otherwise confining the biologically active substance within the device.

54. (Previously Presented) The method according the claim 53 wherein:

said migration of said biologically active substance is promoted by body fluid contact.

55. (Previously Presented) The method according the claim 53 wherein:

said migration of said biologically active substance is promoted by body heat.

56. (Previously Presented) An implantable device for locating within a body, said implantable device comprising:

a body defining an outside surface;

PATENT
Application No. 10/812,837
Attorney Docket No.: 92030/03-701
Amendment

a carrier receiving area defined by said body;
an un-doped carrier material loaded in said carrier receiving area;
a port that communicates said outside surface with said carrier receiving area
for facilitating delivery of a biologically active substance onto said un-doped carrier
material;
a pathway that communicates with said carrier receiving area for delivering
said biologically active substance from said carrier receiving area to a target bone
structure;
a plug in said port adapted to be penetrated by a syringe; and
the interbody spine fusion cage further comprising:
a substantially solid end cap on an end of said cage body wherein
said end cap encloses said carrier receiving area; and
wherein said port is defined by said end cap.

57. (Previously Presented) A bone implantable device for locating adjacent a target bone
structure, said bone implantable device comprising:

a body defining an outside surface;
a carrier receiving area defined by said body;
a pre-loaded carrier material in said carrier receiving area, said pre-loaded

PATENT
Application No. 10/812,837
Attorney Docket No.: 92030/03-701
Amendment

carrier material comprising a biologically active substance;

a pathway that communicates with said carrier receiving area for delivering said biologically active substance from said carrier receiving area to the target bone structure;

a plug in said port adapted to be penetrated by a syringe; and

the interbody spine fusion cage further comprising:

a substantially solid end cap on an end of said cage body wherein

said end cap encloses said carrier receiving area; and

wherein said port is defined by said end cap.

58. (Currently Amended) An interbody spine fusion cage for fusing adjacent vertebrae, said spinal fusion cage comprising:

a cage body defining an outside surface;

a carrier receiving area defined by said cage body;

an un-doped collagen carrier material loaded in said carrier receiving area;

a port that communicates said outside surface with said carrier receiving area for facilitating delivery of a biologically active substance onto said un-doped carrier material;

a pathway that communicates with said carrier receiving area for delivering

PATENT
Application No. 10/812,837
Attorney Docket No.: 92030/03-701
Amendment

said biologically active substance from said carrier receiving area to a target bone structure;

a plug in said port adapted to be penetrated by a syringe;

a substantially solid end cap on an end of said cage body wherein said end cap encloses said carrier receiving area; and

wherein said port is defined by said end cap.

59. (Canceled)

60. (Currently Amended) An implantable device for locating within a body, said implantable device comprising:

a body defining an outside surface;

a carrier receiving area defined by said body;

an un-doped collagen carrier material loaded in said carrier receiving area;

a port that communicates said outside surface with said carrier receiving area for facilitating delivery of a biologically active substance onto said un-doped carrier material;

a pathway that communicates with said carrier receiving area for delivering said biologically active substance from said carrier receiving area to a target bone

PATENT
Application No. 10/812,837
Attorney Docket No.: 92030/03-701
Amendment

structure;

a plug in said port adapted to be penetrated by a syringe;

a substantially solid end cap on an end of said cage body wherein

said end cap encloses said carrier receiving area; and

wherein said port is defined by said end cap.

61. (Canceled)

62. (Previously Presented) An implantable device for locating within a body,
said implantable device comprising:

a body defining an outside surface;

a carrier receiving area defined by said body;

an un-doped, sponge material loaded in said carrier receiving area;

a port that communicates said outside surface with said carrier receiving area
for facilitating delivery of a biologically active substance onto said un-doped carrier
material;

a pathway that communicates with said carrier receiving area for delivering
said biologically active substance from said carrier receiving area to a target bone
structure.

PATENT
Application No. 10/812,837
Attorney Docket No.: 92030/03-701
Amendment

63. (Previously Presented) The implantable device according to claim 62 further comprising:

a plug in said port adapted to be penetrated by a syringe; and

the interbody spine fusion cage further comprising a substantially solid end cap on an end of said cage body wherein said end cap encloses said carrier receiving area; and

wherein said port is defined by said end cap.

64. (Previously Presented) A bone implantable device for locating adjacent a target bone structure, said bone implantable device comprising:

a body defining an outside surface;

a carrier receiving area defined by said body;

a pre-loaded collagen carrier material in said carrier receiving area, said pre-loaded collagen carrier material comprising a biologically active substance;

a pathway that communicates with said carrier receiving area for delivering said biologically active substance from said carrier receiving area to the target bone structure.

PATENT
Application No. 10/812,837
Attorney Docket No.: 92030/03-701
Amendment

65. (Previously Presented) The implantable device according to claim 64 further comprising:

a plug in said port adapted to be penetrated by a syringe; and

the interbody spine fusion cage further comprising:

a substantially solid end cap on an end of said cage body wherein

said end cap encloses said carrier receiving area; and

wherein said port is defined by said end cap.

66. (Currently Amended) A bone implantable device for locating adjacent a target bone structure, said bone implantable device comprising:

a body defining an outside surface;

a carrier receiving area defined by said body;

a pre-loaded ~~carrier~~ sponge material in said carrier receiving area, said pre-loaded sponge material comprising a biologically active substance;

a pathway that communicates with said carrier receiving area for delivering said biologically active substance from said carrier receiving area to the target bone structure.

PATENT
Application No. 10/812,837
Attorney Docket No.: 92030/03-701
Amendment

67. (Previously Presented) The implantable device according to claim 66 further comprising:

a plug in said port adapted to be penetrated by a syringe; and

the interbody spine fusion cage further comprising:

a substantially solid end cap on an end of said cage body wherein

said end cap encloses said carrier receiving area; and

wherein said port is defined by said end cap.

68. (Previously Presented) The method of implanting a bone implantable device according to claim 53 wherein said fluid is liquid.

69. (Previously Presented) The method of implanting a bone implantable device according to claim 53 wherein said fluid is a gel.

PATENT
Application No. 10/812,837
Attorney Docket No.: 92030/03-701
Amendment

70. (Previously Presented) A method of implanting a bone implantable device comprising the steps of:

pre-loading into a carrier receiving area of a bone implantable device a carrier doped with a dissolvable biologically active substance that liquifies after contact with body fluids;

implanting the bone implantable device adjacent a target bone structure for facilitating a migration of said biologically active substance into contact with said target bone structure but otherwise confining the biologically active substance within the device.

71. (Previously Presented) A method of implanting a bone implantable device comprising the steps of:

implanting a bone implantable device adjacent a target bone structure;

applying a fluidal bone growth agent into said bone implantable device;

facilitating migration of said fluidal bone growth agent to said target bone structure by otherwise confining the bone growth agent within said device.

PATENT
Application No. 10/812,837
Attorney Docket No.: 92030/03-701
Amendment

72. (Previously Presented) An interbody spine fusion cage according to claim 21
wherein:
said delivery device is a syringe.

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☒ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.